

Appln. No.: 09/810,948
Preliminary Amendment Dated

NTP-101US

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims

1. (Currently Amended) A multi-wavelength and multi-layer optical disc comprising:
- a substrate in which components of at least one wavelength light beam components isare recorded by modulating the layer's transmissivity of the substrate for each of said components, wherein the information layers of a substrate are located within the a focal depth of a an objective lens for reading the optical disc when the disc is being read;
- a reflective layer on the substrate to reflect the modulated optical signal; and
- a protective layer on the reflective layer.
2. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 1 further comprises a photochromic super-resolution mask layer sandwiched between the substrate and the reflective layer, the photochromic super-resolution mask layer comprising high-order non-linear photochromic materials; wherein all the information layers and the mask layer are located within the focal depth of a the objective lens for reading the disc when the disc is being read.
3. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 1, wherein the information layers of the substrate comprises-comprise photochromic materials.
4. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 1, wherein the information layers being are pre-stamped with information pits.
5. (Currently Amended) A multi-wavelength and multi-layer optical disc comprising:
- a substrate;

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~~at least one multiple recording layers on the substrate, wherein said ~~at least one multiple~~ recording layers ~~comprising~~ comprise at least one kind of photochromic material, said recording layers being orderly arranged one by one on the substrate if there are more than one recording layers, and said at least one multiple recording layers located within the focal depth of a objective lens for reading or writing the disc when the disc is being read or written;~~

~~a reflective layer on the recording layers to reflect the light signal ~~transperanced~~ transmitted from the recording layer; and~~

~~a protective layer on the reflective layer.~~

6. (Canceled)

7. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 5 wherein at least one recording layer of said ~~at least one multiple~~ recording layers ~~comprising~~ comprises ~~the a~~ compound of at least two kinds of photochromic materials.

8. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 5 wherein said at least one recording layer ~~comprising the compound of~~ comprises an organic compound of at least two components selected from a group consisting of spiropyran, spirooxazine, fulgide or axo, or the mixture thereof.

9. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 5, further comprises a photochromic super-resolution mask layer, and at least one of said multiple recording layers ~~(s)~~ is sandwiched between the photochromic super-resolution mask layer and the reflective layer; wherein the recording layers and the mask layer are located within the focal depth of ~~a the~~ objective lens ~~for reading or writing the disc when the disc is being read or written.~~

10. (Currently Amended) The multi-wavelength and multi-layer optical disc as in claim 5 wherein said photochromic super-resolution mask layer comprises organic compounds of at least two components selected from a group consisting of spiropyran or spirooxazine or fulgide or azo, or the mixture thereof.

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cont 11. (Currently Amended) The multi-wavelength and multi-layer optical disc as
in claim 5 wherein the thickness of said at least one recording layer is between 5nm - 100nm.

12. - 26. (Withdrawn)
